

Technical Data Sheet
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Sikagrout® 280 HS

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High Precision, Iron Aggregate and Micro Fibre Reinforced,
Non-Shrink Cementitious Grout

Description	A non shrink, cementitious premixed grout with iron aggregate and micro fibre to provide excellent impact and vibration resistance.
Use	For grouting over a wide range of applications: <ul style="list-style-type: none"> ■ Machine bedding/base plates ■ Turbine -generator set base plates ■ Centrifugal compressors ■ Crane rails ■ Crusher – Ball Mills ■ Structure that has high vibration
Advantages	<ul style="list-style-type: none"> ■ Easy to use, just add water ■ Good flow characteristic. ■ Adjustable consistency. ■ Rapid strength development. ■ Highly Improved Impact and vibration resistant compared to conventional cementitious grout ■ Shrinkage compensated. ■ High final strength. ■ Non-Toxic.
Instruction for Use	
Surface Preparation	Remove dirt, oil, grease, loose material and other bond-inhibiting materials. Anchor bolts to be grouted must be degreased with suitable solvent. Concrete must be sound and roughened to promote mechanical adhesion. Prior to pouring, surface must be wetted to saturated surface dry.
Forming	For flowable grout, construct forms to retain grout without leakage. Form should be lined or coated with bond-breaker for easy removal. Form should be sufficiently high to accommodate head of grout.
Mixing	Put appropriate quantity of water (depend on the required consistency) into a mixing vessel. Add slowly the total contents of SikaGrout® 280 HS while mixing. Mix continuously for 3 minutes to achieve an even consistency. Use a mechanically low speed drill (400–600 rpm) with mixing paddle or suitable pan mixer.
Application	Within 25 minutes after mixing, place grout into forms one side to avoid air entrapment. Do not vibrate. Use a suitable head box of 150–200 mm and maintain the grout head at all times to ensure a continuous flow. Gentle tapping or pulling loops of wire from one side may assist the flow of the mortar under difficult working conditions.
Curing	Wet cure for a minimum of 3 days with wet hessian, plastic sheet or apply a curing compound (Antisol).
Limitation	<p>Minimum applications thickness : 20 mm. Recommended thickness of SikaGrout® 280 HS in one pour is 20 mm to 150 mm.</p> <p>If the application thickness exceeds 150 mm, special procedure must be taken to anticipate temperature rise.</p> <p>Keep the materials and substrate temperature lower than 30° C. Variations in cement could cause shade differences in colour of the mortar.</p>



Technical Data		
Form		Powder
Color		Grey
Flow Condition		Flowable (water per powder ratio = 16% by weight) Flow table after mixing: > 230-mm
Water requirement (Litres per 25 kg bag)		Flowable 4.0 (water per powder ratio = 16% by weight)
Yield (Litres per 25 kg bag)		Approx. 12.7 litre (1 m ³ of grout requires approx. 1,970 kg of SikaGrout 280 HS)
Mix Density		Approx. 2.28 kg/ltr
Setting Time		Initial Approx. 5 – 8 hours (at 27°C) Final Approx. 6 – 9 hours (at 27°C)
Compressive Strength (ASTM C-349)	1 days	400 kg/cm ²
	3 days	600 kg/cm ²
	7 days	730 kg/cm ²
	28 days	880 kg/cm ²
Flexural Strength (ASTM C-348)	1 days	> 80 kg/cm ²
	3 days	>125 kg/cm ²
	7 days	>160 kg/cm ²
	28 days	>200 kg/cm ²
Tensile Strength (ASTM C-496)	28 days	>100 kg/cm ²
Bond Strength to concrete	28 days	>15 kg/cm ² (concrete failure, over mechanically roughened concrete surface)
to grout	28 days	>25 kg/cm ² (over mechanically roughened grout surface)
Expansion (ASTM C-940)		0.05%
Shelf Life		9 months when unopened and stored in dry condition
Packaging		25 kg bag

Handling Precautions:	<ul style="list-style-type: none"> ■ Avoid contact with skin and eyes ■ Wear protective gloves and eye protection during work ■ If skin contact occurs, wash skin thoroughly ■ If in eyes, hold eyes open, flood with warm water and seek medical attention without delay.
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Legal Notes

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the product when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.



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